UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

JUDITH A. HENDRIAN, Individually and as Personal Representative of the Estate of HOWARD G. HENDRIAN, Deceased,

Plaintiff,

v.

Case No. 08-14371 Honorable Julian Abele Cook, Jr.

SAFETY-KLEEN SYSTEMS, INC.,

Defendant.

ORDER

On October 15, 2008, the Plaintiff, Judith Hendrian, acting individually and as the personal representative of the estate of her deceased husband, Howard G. Hendrian ("Hendrian"), filed this products liability action against the Defendant, Safety-Kleen Systems, Inc. ("Safety-Kleen"). The facts and the procedural history of this case have been described in detail by this Court in a previously entered order which denied Safety-Kleen's motion for summary judgment. (Order Denying Mot. Summ. J. August 30, 2012, ECF No. 57).

To summarize, the Plaintiff alleges that her husband was exposed to a cleaning solvent while working at Ford Motor Company. This cleaning solvent (to wit, "SK-105") which had been produced by Safety-Kleen contained the chemical "benzene" that was allegedly carcinogenic to

¹The Court has interchanged the words, "Defendant," and "Safety-Kleen" in this order without any intention of giving emphasis or significance to the arguments or the positions of either party in this controversy.

humans. The Plaintiff maintains that her husband's exposure to SK-105 caused him to incur serious medical problems including an acute form of myelogenous leukemia, which ultimately led to his death in 2007. (Compl. ¶ 12). In making her claims, the Plaintiff has advanced four basic theories of liability against Safety-Kleen; namely, (1) failure to warn, (2) strict liability,² (3) negligence, and (4) loss of consortium.

On November 4, 2013, the Court referred six motions in limine filed by the parties to Magistrate Judge Mark A. Randon. *See* (Order Referring Motions, ECF No. 123). The motions concerned various *Daubert* challenges and related objections to anticipated expert testimony. Between January 17, 2014 and February 5, 2014, the magistrate judge issued a series of orders which (1) significantly undercut the Plaintiff's ability to elicit testimony from its proposed expert witnesses, and (2) permitted the Defendant to explore certain lines of questioning with respect to "Method 9211"- a proprietary analytical technique used to determine the amount of benzene contained in SK-105. *See* (Orders, Mot. in Lim., ECF Nos: 198, 200, 201, 208, 209).

Currently before the Court are the Plaintiff's objections to four of the magistrate judge's orders, to wit: (1) ECF No. 208- Denying in part the Plaintiff's motion to exclude all evidence based on Safety-Kleen's Method No. 9211, (2) ECF No. 198- Granting in part Safety-Kleen's motion to preclude the testimony and report of Melyvn Kopstein, Ph.D, (3) ECF No. 200- Granting Safety-Kleen's motion to preclude the testimony and report of Nachman Brautbar, M.D., and (4) ECF No. 201- Denying as moot the Plaintiff's motion to exclude the prior testimonial history of Nachman Brautbar.

² The Court has interpreted the Plaintiff's claim for strict liability (which is not recognized as an enforceable tort under Michigan law) as a design defect claim in product liability. (Order Denying Mot. for Summ. J. at 11).

I.

If a litigant expresses an objection to a magistrate judge's ruling on a nondispositive pretrial matter, the district court may "modify or set aside any part of the order that is clearly erroneous or is contrary to law." Fed.R.Civ.P. 72(a); see also 28 U.S.C. § 636(b)(1). The "clearly erroneous" standard does not permit a district court to reverse the magistrate judge's finding simply because the issue would have been decided differently. *Anderson v. City of Bessemer, N.C.*, 470 U.S. 564, 573, 105 S.Ct. 1504, 84 L.Ed.2d 518 (1985). Rather, a "finding is 'clearly erroneous' when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed." *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 395, 68 S.Ct. 525, 92 L.Ed. 746 (1948). Consistent with this standard of review, a magistrate judge's decision to exclude expert testimony is reviewed for an abuse of discretion. *Nelson v. Tennessee Gas Pipeline Co.*, 243 F.3d 244, 248 (6th Cir. 2001).

II.

As a preliminary matter, the Court notes that many of the Plaintiff's objections are overly vague references to general wholly inapplicable legal principles without any supporting argument. By way of example, the Plaintiff maintains that the magistrate judge's order(s) violate her right "to due process under the Fifth Amendment" and to a "jury trial under the Seventh Amendment." (Plf's Obj. Mot., ECF No. 203 at 4).

A party forfeits a right to the review of a magistrate judge's decision if his objections are general, conclusory, and unrelated to a specific error within the challenged order. *See McPherson* v. *Kelsey*, 125 F.3d 989, 995 (6th Cir.1997) ("[I]ssues adverted to in a perfunctory manner, unaccompanied by some effort at developed argumentation, are deemed waived."). In light of the

Plaintiff's failure to properly substantiate her arguments, the Court deems the following objections to be waived: ECF No. 203, Objection Nos. 9-13, and ECF No. 204, Objection Nos. 6-10.

III.

The Plaintiff's remaining objections – spread over four separate motions – implicate the minimum standards of admissibility established by Fed. R. Evid. 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). Specifically, it is the Plaintiff's contention that the magistrate judge erred by striking or limiting the testimony of her expert witnesses, and further by allowing the Defendant to explore certain lines of questioning related to Method 9211.

The admissibility of expert testimony is governed by the Federal Rules of Evidence, which provide as follows:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's skill, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed.R.Evid. 702. The Supreme Court elaborated upon the requirements of this Rule in *Daubert* in the following manner. "[U]nder the Rules the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." *Daubert*, 509 U.S. at 589. The *Daubert* Court listed four factors that courts may consider: whether the challenged theory or technique (1) can be and has been tested, (2) has been subjected to peer review or publication, (3) is subject to a known or potential error rate, and (4) is generally accepted by the scientific community. *Id.* at 593–94. "Widespread acceptance can be an important factor in ruling particular

evidence admissible, and 'a known technique which has been able to attract only minimal support within the community' may properly be viewed with skepticism." *Id.* at 594 (internal quotation marks omitted). The Supreme Court emphasized that the required inquiry is flexible and courts may consider other factors as well. *Id.* "Thus, under Fed. R. Evid. 702's codification of *Daubert*, the general rule of liberal admission of proper evidence is retained." *United States v. Nacchio*, 555 F.3d 1234, 1280 (10th Cir. 2009).

A. ECF No. 210: Safety-Kleen's Analytical Method 9211

The Plaintiff's first set of objections concerns the magistrate judge's determination that "Method 9211 need not satisfy *Daubert:* [to the extent] it is factual testimony based on personal knowledge and participation in the day-to-day affairs of the business." (Order re Analytical Method No. 9211, ECF No. 208 at 2). While acknowledging Safety-Kleen's right to proffer lay witness testimony concerning Method 9211, the magistrate judge specifically precluded any line of questioning regarding "how Method 9211 works, the reliability or accuracy of Method 9211, or any [testimony] indicat[ing] that the results of Method 9211 was a reflection of the *actual* benzene content in SK-105, without first satisfying *Daubert.*" *Id.* at 3 (emphasis in original). Notwithstanding this critical limitation, the Plaintiff contends that the magistrate judge's conclusion erroneously allows Safety-Kleen's employees to testify to the benzene content of SK-105 even though Method 9211 allegedly "does not satisfy the scientific reliability requirements of *Daubert*" (Pl's Obj. Mot., ECF No. 210 at 2).

Despite the Plaintiff's failure to make any reasonable attempt at articulating how the magistrate judge's alleged error satisfies the standard set forth under Fed. R. Civ. P. 72(a), the Court finds her objections to be substantively deficient for a number of reasons. First and foremost,

the Plaintiff is not challenging the admissibility of Safety-Kleen's expert witness testimony as it relates to the scientific validity of Method 9211. Instead, the Plaintiff has focused her challenge on the underlying results produced by Method 9211 and Safety-Kleen's reliance on this data to make various corporate decisions regarding the formulation of its labels and warnings. Even assuming, arguendo, that the Plaintiff was lodging a challenge to expert testimony, however, Daubert is clear that a trial judge must undertake "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether the reasoning or methodology properly can be applied to the facts in issue." Daubert, 509 U.S. 592-93. Thus, "Daubert generally does not . . . regulate the underlying facts or data that an expert relies on when forming her opinion." U.S. v. Lauder, 409 F.3d 1254, 1264 (10th Cir. 2005).

In *Lauder*, the defendant challenged the admissibility of fingerprint cards which were created using a "live-skin method" that digitally recorded the defendant's prints. *Id.* at 1262. While opting not to challenge the admissibility of the fingerprint expert's testimony – or the methodology used to match the prints to the evidence – the defendant instead argued that "the district court was required to make factual findings regarding the reliability of the live-skin method, which it did not do." *Id.* at 1263. The court ultimately disagreed, finding a "critical distinction" between a challenge to expert testimony or methodology on the one hand, and the admissibility of factual evidence on the other. *Id.* at 1264. While the former "could fall within the *Daubert* framework", the reliability of the latter can be contested in any number of ways under the Federal Rules of Evidence. *Id.* Indeed, as several courts have held, "[a]s a general rule the factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination." *Bonner v. ISP Techs., Inc.*, 259

F.3d 924, 929 (8th Cir. 2001). *See also Walker v. Soo Line R. Co.*, 208 F.3d 581, 586-87 (7th Cir. 2000) ("the factual underpinnings of expert testimony may be subject to counter–attack.").

Likewise here, the magistrate judge, recognizing the distinction explained above, crafted an appropriate safeguard to make certain that both parties are adequately protected. Indeed, while Safety-Kleen is free to call employees with personal knowledge pertaining to the formation of its labels and warnings to testify regarding the results generated by Method 9211, any discussion of the reliability or accuracy of the Method is strictly forbidden without first satisfying *Daubert*.³ Moreover, the Plaintiff is free to rely on her own duly qualified experts to opine on, *inter alia*, the scientific merit of Method 9211. Accordingly, the Court will overrule the Plaintiff's objection (ECF No. 210) to the magistrate judge's order.

B. ECF No. 203: Expert Testimony of Dr. Melvyn Kopstein, Ph.D.

Moving to the Plaintiff's second set of objections, the Court will now address the magistrate judge's order granting in part Safety-Kleen's motion to preclude the expert testimony and report of Dr. Melvyn Kopstein. (ECF No. 198). Consistent with the Plaintiff's approach thus far, she submits a laundry list of objections to the Court while offering little along the lines of a substantiated legal argument. In sum and substance, the Plaintiff's challenge is focused on the magistrate judge's determination that the methodology employed by Dr. Kopstein to determine Hendrian's benzene exposure from SK-105 is flawed and thus wholly unreliable. More specifically, the Plaintiff appears to take issue with the magistrate judge's decision to preclude Dr. Kopstein from testifying or offering an opinion about "(1) the benzene content and exposure-specific

³The Court notes, however, that the deadline for filing motions *in limine* expired on October 28, 2013, and the Plaintiff has failed to preserve any challenge in this regard.

chemical properties of SK-105; and, (2) Hendrian's inhalation exposures to benzene arising from his use of SK-105." (Order re Melvyn Kopstein, ECF No. 198 at 3).

The crux of any *Daubert* challenge comes down to the scientific reliability of a given expert's opinion. *See Daubert*, 509 U.S. at 590 ("The adjective 'scientific' implies a grounding in the methods and procedures of science. Similarly, the word 'knowledge' connotes more than subjective belief or unsupported speculation.""). Contrary to the Plaintiff's suggestion in her briefing, "the proponent of the testimony must establish its admissibility by a preponderance of proof." *Nelson v. Tennessee Gas Pipeline Co.*, 243 F.3d 244, 251 (6th Cir. 2001). The primary debate surrounding Dr. Kopstein's opinion is his conclusion "that the benzene content of [SK-105] is approximately 1,000 parts per million (ppm)." (Plf's Obj. Mot., ECF No. 203 at 2). According to the Plaintiff, the magistrate judge erred in dismissing Dr. Kopstein's benzene content analysis by, *inter alia*, (1) concluding that he relied on only one study in support of his opinion, (2) determining that the "Carpenter" study was unreliable, and (3) suggesting that Dr. Kopstein was required to test SK-105 in order to render a scientifically reliable opinion. *Id.* at 2-3.

The Plaintiff initially claims that Dr. Kopstein "relied on more than a dozen studies . . . in concluding that the benzene content of [SK-105] is approximately 1,000 [ppm]." (Plf's Obj. Brf. 3). Even assuming, *arguendo*, that the twelve studies referenced by the Plaintiff in her objection do provide support for Dr. Kopstein's methodology, she has failed to offer even a modicum of discussion in support of this assertion. It is well understood that "it is not sufficient for a party to mention a possible argument in the most skeletal way, leaving the court to . . . put flesh on its

⁴As the Court will discuss, this finding is particularly important in light of the impact it has on the opinion of Dr. Nachman Brautbar, Hendrian's causation expert.

bones." *McPherson v. Kelsey*, 125 F.3d 989, 995 (6th Cir. 1997). Moreover, this argument misses a fundamental point: namely, the Plaintiff's own admission that these studies concern "the benzene content of *mineral spirits* (the starter material that Safety-Kleen used for its 105 Solvent)" (Plf's Obj. Brf. 5) (emphasis added). The importance of this admission becomes clear when it is considered in connection with the suggestion by the counsel for the Plaintiff that "Safety-Kleen 105 *is not mineral spirits*." (Mot. in Lim. Hr'g Tr. 69:11) (emphasis added). The Court is simply unwilling to adopt the Plaintiff's unsubstantiated representations concerning the studies relied upon by Dr. Kopstein where, as here, even the most basic of assumptions militate against his ultimate conclusion. This is precisely the kind of blind deference to expert opinion that *Daubert* cousels against.

Nor does the Plaintiff's second objection—concerning the magistrate judge's treatment of the "Carpenter" study—give the Court any additional confidence in Dr. Kopstein's opinions. According to the Plaintiff, the magistrate judge dismissed the Carpenter study on the mere basis that it was "outdated and no longer reliable." (Plf's Obj. Brf. 8). Even assuming this was the sole basis of the magistrate's skepticism—which, even a cursory review of his opinion suggests it was not—Dr. Kopstein's own testimony can be credited with prompting this concern. Indeed, as the magistrate judge accurately surmised, "[w]hen the dust settles, the lynchpin of Dr. Kopstein's opinion that SK-105 contained 1,000 ppm benzene is the Carpenter study, which was published more than 15 years *before* Hendrian used SK-105." (Order re Kopstein, ECF No. 198 at 8).

As Dr. Kopstein readily admits, however, the benzene content of mineral spirits-the

⁵See Carpenter, C.P., E.R Kinkead, D.L. Geary, et al: *Petroleum Hydrocarbon Toxicity Studies III. Animal and Human Response to Vapors of Stoddard Solvent.* Toxicol. App. Pharm. 32:282-297 (1975) (ECF No. 118; Ex. H).

alleged starter material that Safety-Kleen used for its 105 Solvent–generally declined during the 15 years between the Carpenter study and Hendrian's exposure to SK-105:

Q: [W]ould the Safety-Kleen averages of the 35 to 40 parts per million range for 1992 and 1993 be consistent with the amounts of benzene that your historical experience would have led you to expect in mineral spirit products generally?

A: Yes, it reflects the diminution of the benzene in the[se] type[s] of products.

(Deposition of Dr. Kopstein, ECF No. 118, Ex. M, 90-91). This historical decline is further supported by at least one of the publications cited in Dr. Kopstein's expert report. *See* 1989 IRAC Monograph (ECF No. 118; Ex. E at 48, 58) ("In the past 20-30 years, there has been a pronounced move from nonhydrogenated grades towards hydrogenated (i.e. minimal aromatics)... grades" that contain far less benzene than the 1,000 ppm approximation offered by Dr. Kopstein.). Notwithstanding Dr. Kopstein's prior testimony and his reliance on the 1989 IRAC Monograph, he declined to address the impact of this historical trend in his own analysis. As such, the Court is not persuaded that Dr. Kopstein's methodology was reliable at "every step," thus calling into question both his benzene concentration analysis of SK-105 and Hendrian's alleged inhalation exposures stemming therefrom. *See* Fed. R. Evid. 702, advisory committee's note, 2000 amend ("any step that renders the analysis unreliable . . . renders the expert's testimony inadmissible.").

Finally, with respect to the Plaintiff's last objection, she appears to argue that the magistrate judge wrongfully faulted Dr. Kopstein for not independently testing SK-105 to determine its benzene content. (Plf's Obj. Brf. 10). The Court finds this objection to be without merit. Indeed, the magistrate judge specifically noted that "Dr. Kopstein is *not required* to independently test SK-105; he can rely on other scientific and accepted data." (Order, ECF No. 198 at 9) (emphasis added). In

light of the fact that Dr. Kopstein did not personally examine SK-105, however, the magistrate judge–and, for that matter, this Court–found it highly suspect that he failed to "factor into [his] estimate more recent studies acknowledging the trend–to which he himself attests–toward a decreasing benzene content in mineral spirits between 1975 and the early 1990s." *Id.* In short, this fact is simply more evidence compelling the same conclusion; namely, that the methodology employed by Dr. Kopstein is neither scientifically reliable nor has it been subjected to an objective, independent evaluation or confirmation. As such, the Court must and does deny the Plaintiff's objection to the magistrate judge's order prohibiting Dr. Kopstein from testifying as to the benzene content of SK-105 or Hendrian's inhalation exposure arising from his use of SK-105.

C. ECF No. 204: Expert Testimony of Dr. Nachman Brautbar, M.D.

The Plaintiff further appeals the magistrate judge's decision to prohibit the expert testimony of Dr. Brautbar on the issue of causation, i.e. whether Hendrian's AML was caused by his exposure to SK-105. While failing to address any of the authority contained in the magistrate judge's order, the Plaintiff asserts a number of objections which all essentially come down to the same issue; namely, Dr. Brautbar's reliance on Dr. Kopstein's estimate—rejected by this Court—that the SK-105 Hendrian used contained 1,000ppm benzene. The courts have been clear that "a plaintiff must demonstrate 'the levels of exposure that are hazardous to human beings generally as well as the plaintiff's actual level of exposure to the defendant's toxic substance before he or she may recover." *Mitchell v. Gencorp, Inc.*, 165 F.3d 778, 781 (10th Cir. 1999); *see also Wright v. Willamette Indus., Inc.*, 91 F.3d 1105, 1106 (8th Cir. 1996) (same); *Wintz By & Through Wintz v. Northrop Corp.*, 110 F.3d 508, 513 (7th Cir. 1997) ("the expert should examine if the plaintiff was exposed to the chemical in a manner that can lead to absorption into the body [and] should offer an opinion as to

whether the dose to which the plaintiff was exposed is sufficient to cause the disease.") (citations omitted); *Allen v. Pennsylvania Eng'g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996) ("[s]cientific knowledge of the harmful level of exposure to a chemical, plus knowledge that the plaintiff was exposed to such quantities, are minimal facts necessary to sustain the plaintiffs' burden in a toxic tort case."). Because the Court finds Dr. Kopstein's benzene content analysis to be unreliable, it logically follows that Dr. Brautbar's causation opinion—which is based on this information—is likewise suspect and, therefore, inadmissible. *See Pluck v. BP Oil Pipeline Co.*, 640 F.3d 671, 676-77 (6th Cir. 2011) ("In a toxic-tort case, as here, the plaintiff must establish both general and specific causation through proof that the toxic substance is capable of causing, and did cause, the plaintiff's alleged injury.").

The Court is likewise unconvinced that Dr. Brautbar's alternative causation opinion–premised under the theory of "differential diagnosis"–is any more reliable. Indeed, while the Sixth Circuit has recognized differential diagnosis as a permissible method for determining specific causation–a process whereby the "physician considers all relevant potential causes of the symptoms and then eliminates alternative causes based on physical examination, clinical tests, and a thorough case history"–*Hardyman v. Norfolk & W. Ry. Co.*, 243 F.3d 255, 260 (6th Cir. 2000), the bottom line is that "most cases of AML have no clear cause." http://www.cancer.org/acs/groups/cid/documents/webcontent/003055-pdf.pdf (last visited March 28, 2014). As such, "the presence of a known risk factor is not a sufficient basis for ruling out idiopathic origin in a particular case, particularly where most cases of the disease have no known cause. [I]n [these] cases, analysis beyond a differential diagnosis is required." *Henricksen v. Conoco Phillips Co.*, 605 F.Supp.2d 1142, 1162 (E.D. Wash. 2009).

This reasoning applies with equal force to Dr. Brautbar's "biological markers" theory,

premised on the idea that because Hendrian exhibited certain traits-namely, macrocytosis and chromosomal abnormalities—he should not be required to quantify the level of benzene contained in SK-105. (Plf's Obj. Brf., ECF No. 204 at 8). The basis for this conclusion appears to be that "whan [sic] a workers' MDS/AML is preceded by macrocytosis and is accompanied with benzenerelated chromosome abnormalities, these markers of exposure obviate the need for proof for succiency [sic] of dose, because the markers themselves are strong indications of benzene exposure." Id. at 9 (quoting Dr. Brautbar's Supp. Report, ECF No. 71 at 9). Even assuming there was scientific merit to Dr. Brautbar's opinion in this regard, the Plaintiff has failed to suggest how this constitutes a "permissibly admissible differential diagnosis. 'A differential diagnosis seeks to identify the disease causing a patient's symptoms by ruling in all possible diseases and ruling out alternative diseases until (if all goes well) one arrives at the most likely cause." Tamraz v. Lincoln Elec. Co., 620 F.3d 665, 674 (6th Cir. 2010) ("[S]imply claiming that an expert used the 'differential diagnosis' method is not some incantation that opens the Daubert gate."). Here, the Plaintiff makes no attempt at explaining how, if at all, Dr. Brautbar "ruled out" all potential alternative causes, including, most importantly for purposes for AML, idiopathic origin. As such, the Court must and does overrule the Plaintiff's objection to the magistrate judge's order prohibiting Dr. Brautbar from testifying in this matter.

D. ECF No. 202/205: Exclusion of Dr. Brautbar's Testimony in Prior Cases

In light of the Court's Order which precludes Dr. Brautbar from testifying in this matter, the Plaintiff's objection to the magistrate's order concerning Dr. Brautbar's prior testimony is moot.

Accordingly, the Court overrules the Plaintiff's objection in this regard.

For the reasons explained above, the Court holds as follows:

1. Plaintiff's Objection to the Admissibility of Evidence Regarding the Benzene Content of

Safety-Kleen 105 Recycled Solvent that is Based on Analytical Method 9211 (ECF No.

210) is denied.

2. Plaintiff's Objection to the Exclusion of the Proposed Testimony of Melvin Kopstein

(ECF No. 203) is denied. Dr. Kopstein shall not be permitted to testify at trial about (1)

the benzene content and exposure specific chemical properties of SK-105, and (2) the

Plaintiff's inhalation exposures to benzene arising from his use of SK-105.

3. Plaintiff's Objection to the Exclusion of the Proposed Testimony of Nachman Brautbar

(ECF No. 204) is denied. Dr. Brautbar shall not be permitted to testify at the trial of this

matter.

4. Plaintiff's Objection to the Exclusion of Dr. Brautbar's Testimony from Prior Cases

(ECF Nos. 202 & 205) is denied.

IT IS SO ORDERED.

Date: April 15, 2014

s/Julian Abele Cook, Jr.
JULIAN ABELE COOK, JR.

U.S. District Judge

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Order was served upon counsel of record via the Court's ECF System to their respective email addresses or First Class U.S. mail to the non-ECF participants on April 15, 2014.

s/ Kay Doaks

Case Manager

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